



Sen. Dan Kotowski

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1 AMENDMENT TO SENATE BILL 451

2 AMENDMENT NO. _____. Amend Senate Bill 451 by replacing
3 everything after the enacting clause with the following:

4 "Section 5. The Hydraulic Fracturing Regulatory Act is
5 amended by adding Section 1-99.5 as follows:

6 (225 ILCS 732/1-99.5 new)

7 Sec. 1-99.5. The Illinois Active Earthquake Zone
8 Investigative Task Force.

9 (a) The Department shall, on the effective date of this
10 amendatory Act of the 99th General Assembly, suspend the
11 acceptance or approval of any and all new or modified permits
12 for high volume horizontal fracturing wells and operations,
13 horizontal drilled wells with fracturing operations, and Class
14 II injection wells that are located within any and all counties
15 that wholly or partially contain any part of the New Madrid
16 seismic zone, the Wabash Valley seismic zone, Cottage Grove

1 fault system, Rough Creek-Shawneetown fault system, the
2 magmatic system of Hicks Dome, the Illinois-Kentucky Fluorspar
3 District, or the NNW-trending La Salle, Du Quoin, and Clay City
4 fold systems. The Department shall also suspend any approval of
5 waste management plans for high volume horizontal fracturing
6 wells and operations, horizontal drilled wells with fracturing
7 operations, for disposal of oil, liquid natural gas, or natural
8 gas waste in existing Class II injection wells if they are
9 located within any and all counties that wholly or partially
10 contain any part of the New Madrid seismic zone, the Wabash
11 Valley seismic zone, Cottage Grove fault system, Rough
12 Creek-Shawneetown fault system, the magmatic system of Hicks
13 Dome, the Illinois-Kentucky Fluorspar District, or the
14 NNW-trending La Salle, Du Quoin, and Clay City fold systems.

15 (b) The Department shall work with the Illinois State
16 Geological Survey to perform probability mapping of all active
17 seismic zones in this State listed in subsection (a). Using
18 existing data and resources at the Illinois State Geological
19 Survey and the United States Geological Survey, along with data
20 on faults in brittle rock, the Illinois State Geological Survey
21 shall outline, for each county, the areas of the active faults
22 listed in subsection (a) that carry a high, medium, and low
23 probability of seismicity from oil, liquid natural gas, and gas
24 waste disposal in Class II injection wells.

25 (c) The Illinois Active Earthquake Zone Investigative Task
26 Force is hereby created. The Task Force shall have the

1 following members:

2 (1) the Director, or his or her representative, from
3 each of the following State agencies: the Illinois
4 Emergency Management Agency, the Department of Natural
5 Resources, the Department of Public Health, the Illinois
6 State Water Survey, the Illinois Pollution Control Board,
7 the Illinois Environmental Protection Agency, the Illinois
8 State Geological Survey, and the Department of Insurance;

9 (2) one independent expert in risk assessment in
10 earthquake zones and its impact on insurance rates and
11 ratings appointed by the Director of Insurance;

12 (3) one university-based independent seismologist with
13 expertise in induced seismicity appointed by the Director
14 of the Illinois State Geological Survey; and

15 (4) one member from the Illinois Attorney General's
16 office appointed by the Attorney General.

17 (d) The chairperson of the Illinois Active Earthquake Zone
18 Investigative Task Force shall be the Director of the Illinois
19 Emergency Management Agency, or his or her representative. The
20 members shall be appointed no later than 60 days after the
21 effective date of this amendatory Act of the 99th General
22 Assembly.

23 The Illinois Active Earthquake Zone Investigative Task
24 Force shall:

25 (1) Meet once a month, either in person or through
26 video conferencing capabilities, beginning no later than

1 90 days after the effective date of this amendatory Act of
2 the 99th General Assembly.

3 (2) Operate without pay, but with all expenses paid for
4 the functioning of the Task Force to be allocated by the
5 Illinois Emergency Management Agency.

6 (3) Investigate any and all adverse effects, or risks,
7 of induced seismicity by the disposal of oil, liquid
8 natural gas, and natural gas waste in Class II injection
9 wells in active earthquake zones. And in particular, if the
10 Class II injection wells are located within any and all
11 counties that wholly or partially contain any part of the
12 New Madrid seismic zone, the Wabash Valley seismic zone,
13 Cottage Grove fault system, Rough Creek-Shawneetown fault
14 system, the magmatic system of Hicks Dome, the
15 Illinois-Kentucky Fluorspar District, or the NNW-trending
16 La Salle, Du Quoin, and Clay City fold systems.

17 (4) Examine the probability of induced seismicity in
18 Illinois active seismic zones and any and all adverse
19 effects or risks of possible induced seismicity on:

20 (A) water resources, water wells, aquifers, dams,
21 canals, any possible contamination, and the
22 environment, including possible soil and air
23 contamination;

24 (B) public health effects, including mental health
25 adverse effects of repeated induced seismic events;

26 (C) adverse effects on property, including

1 livestock and domesticated animals;

2 (D) adverse effects on tourism and recreational
3 activities in the active seismic zones of this State;

4 (E) risk management issues, including emergency
5 management plans;

6 (F) risk management issues, including liability
7 issues, bonding issues, and insurance requirements for
8 operators, well owners, land owners, mineral rights
9 owners, lessors, and subcontractors and the effects on
10 insurance rates and ratings, mortgages, small
11 businesses and their insurance and mortgage rates and
12 availability;

13 (G) effects on the mechanical integrity of the oil,
14 liquid natural gas, and natural gas wells, Class II
15 injection wells, and the oil, liquid natural gas, and
16 natural gas industry critical infrastructure,
17 including pipelines, and any possible contamination
18 from a breach of mechanical integrity of these
19 structures;

20 (H) effects of potential spillage, leakage, fires,
21 or blowouts of the oil, liquid natural gas and natural
22 gas wells, fracturing waste and waste water
23 containment structures including open pits, oil,
24 liquid natural gas and natural gas processing
25 infrastructure, and transportation infrastructure,
26 including pipelines, secondary to possible induced

1 seismicity;

2 (I) effects of potential spillage, leakage, fires,
3 or blowouts of chemicals, proppants, and byproducts,
4 and their containment, processing, and transportation
5 infrastructure, secondary to possible induced
6 seismicity;

7 (J) the safety of any nuclear power plants, uranium
8 processing plants, or low level radioactive waste
9 storage sites in this State and the surrounding states
10 that might be impacted by induced seismicity triggered
11 within the active seismic zones in this State;

12 (K) the risks of inducing a major earthquake,
13 greater than magnitude 6, either immediately or in the
14 future, on all of the issues delineated in this
15 Section, and the risk management issues involved with a
16 higher level of induced seismicity; and

17 (L) whether the Green Light, Yellow Light, Red
18 Light system of mitigation of induced seismicity,
19 proposed by the Illinois State Geological Survey and
20 the Department of Natural Resources, is appropriate or
21 sufficient for real mitigation of all adverse effects
22 of induced seismicity in the active seismic zones in
23 this State.

24 (e) The Illinois Active Earthquake Zone Investigative Task
25 Force shall investigate the issues under subsection (d) and
26 write a report to be submitted to the General Assembly, the

1 Governor, the Hydraulic Fracturing Task Force, the Illinois
2 Emergency Management Agency, the Department of Natural
3 Resources, the Department of Public Health, the Illinois State
4 Water Survey, the Illinois Pollution Control Board, the
5 Illinois Environmental Protection Agency, the Illinois State
6 Geological Survey, the Department of Insurance, the Illinois
7 Attorney General, and to the public via the website of the
8 Illinois Emergency Management Agency and the website of the
9 Department of Natural Resources. The report shall be as
10 complete as possible when discussing the risks and the possible
11 mitigation of the risks of induced seismicity shall include
12 recommendations and conclusions about naturally occurring
13 seismic events in the active seismic zones listed in subsection
14 (a), including:

15 (1) the risks of drilling and extracting oil, liquid
16 natural gas, and natural gas in active seismic zones;

17 (2) the risks of drilling and operating Class II
18 injection wells in active seismic zones;

19 (3) the use of fracturing waste or wastewater open pits
20 in active seismic zones;

21 (4) earthquake induced contamination of air, water,
22 and soil from oil and natural gas extraction operations and
23 waste disposal, the clean up and public health effects of
24 the contamination;

25 (5) emergency management recommendations during
26 earthquakes involving areas of oil and natural gas

1 operations and infrastructure;

2 (6) earthquake induced spillage and leakage from oil
3 and natural gas wells;

4 (7) oil and natural gas infrastructure instability
5 during earthquakes;

6 (8) bonding requirements for oil and natural gas
7 operations and infrastructure in active seismic zones;

8 (9) insurance requirements for oil and natural gas
9 operations and infrastructure in active seismic zones;

10 (10) best practices for the oil and natural gas
11 industry in active seismic zones; and

12 (11) any and all emergency management, transportation,
13 and communication recommendations related to the oil and
14 natural gas industry and its operations before, during, and
15 after an earthquake.

16 (f) The report shall include recommendations to the General
17 Assembly and Governor for legislation to protect the public
18 health and environment, property, livelihoods, and communities
19 from all reported adverse affects of induced seismicity in the
20 Illinois active seismic zones, including recommendations to
21 the General Assembly about legislation to limit damages, harms,
22 risks, contamination, and legal challenges over liability
23 secondary to naturally concurring seismic events in the active
24 seismic zones and how to mitigate the risks from blowouts,
25 spillage, leakage, and damages to the mechanical integrity of
26 oil, liquid natural gas, and natural gas wells, drilling, Class

1 II injection wells, waste and waste water containment,
2 pipelines, infrastructure, chemicals, proppants, and
3 byproducts. This report shall also include any and all
4 emergency management, transportation, and communication
5 recommendations related to the oil and natural gas industry and
6 its operations before, during, and after induced seismicity and
7 naturally occurring seismic events.

8 (g) The Illinois Active Earthquake Zone Investigative Task
9 Force shall submit its report on or before January 1, 2018. The
10 Task Force shall be dissolved on July 1, 2018.

11 Section 99. Effective date. This Act takes effect upon
12 becoming law."